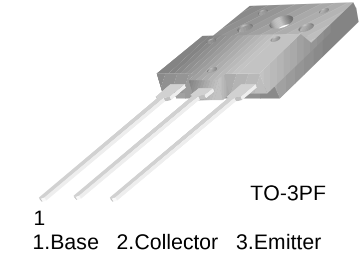


FJAF6916

High Voltage Color Display Horizontal Deflection Output

- High Collector-Base Breakdown Voltage : BV_{CBO} = 1700V
- Low Saturation Voltage : $V_{CE}(sat)$ = 3V (Max.)
- For Color Monitor



TO-3PF

1

1.Base 2.Collector 3.Emitter

NPN Triple Diffused Planar Silicon Transistor

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Rating	Units
V_{CBO}	Collector-Base Voltage	1700	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current (DC)	16	A
I_{CP}*	Collector Current (Pulse)	30	A
P_C	Collector Dissipation	60	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 ~ 150	°C

* Pulse Test: PW=300µs, duty Cycle=2% Pulsed

Electrical Characteristics T_C=25°C unless otherwise noted

Symbol	Parameter	Test Conditions	Min	Typ	Max	Units
I_{CES}	Collector Cut-off Current	V_{CB}=1400V, R_{BE}=0			1	mA
I_{CBO}	Collector Cut-off Current	V_{CB}=800V, I_E=0			10	µA
I_{EBO}	Emitter Cut-off Current	V_{EB}=4V, I_C=0			1	mA
BV_{CBO}	Collector-Base Breakdown Voltage	I_C=500µA, I_E=0	1700			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C=5mA, I_B=0	800			V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E=500µA, I_C=0	6			V
h_{FE1} h_{FE2}	DC Current Gain	V_{CE}=5V, I_C=1A V_{CE}=5V, I_C=8.5A	10 6		 9	
$V_{CE}(sat)$	Collector-Emitter Saturation Voltage	I_C=10A, I_B=2.5A			3	V
$V_{BE}(sat)$	Base-Emitter Saturation Voltage	I_C=10A, I_B=2.5A			1.5	V
t_{STG}*	Storage Time	V_{CC}=200V, I_C=8A, R_L=25Ω I_{B1}=1.6A, I_{B2}=-3.2A			4	µs
t_F*	Fall Time				0.3	µs

* Pulse Test: PW=20µs, duty Cycle=1% Pulsed

Thermal Characteristics T_C=25°C unless otherwise noted

Symbol	Parameter	Typ	Max	Units
$R_{\theta jC}$	Thermal Resistance, Junction to Case		2.08	°C/W

Typical Characteristics

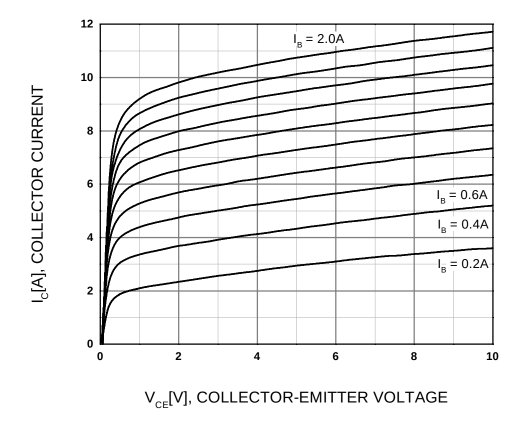


Figure 1. Static Characteristics

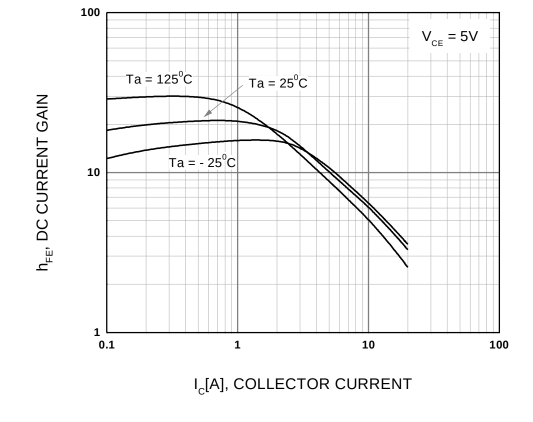


Figure 2. DC Current Gain

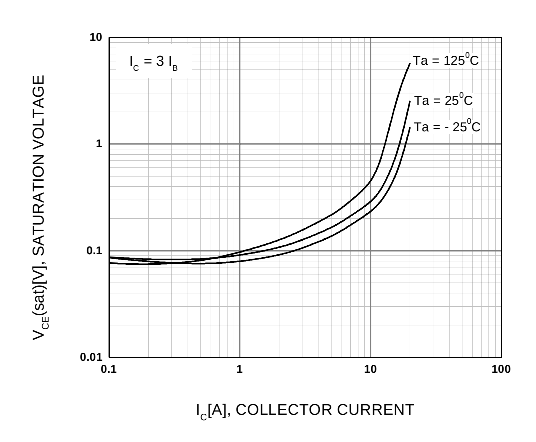


Figure 3. Collector-Emitter Saturation Voltage

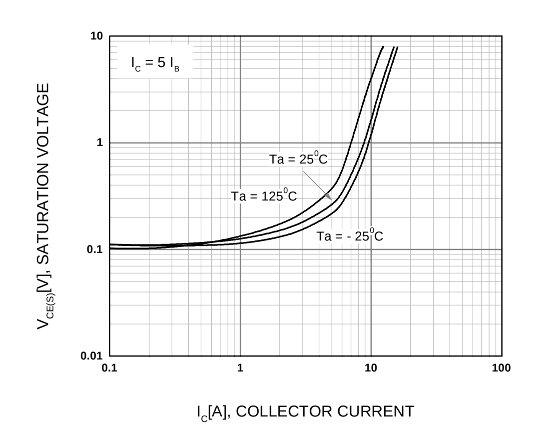


Figure 4. Collector-Emitter Saturation Voltage

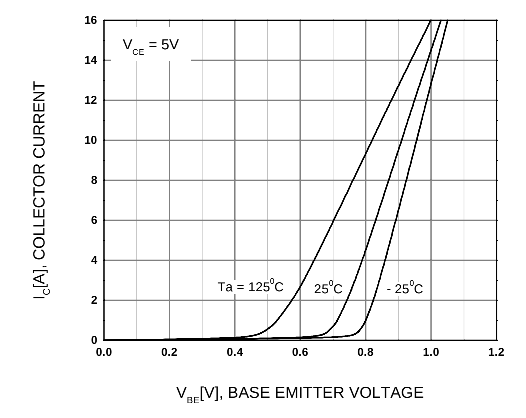


Figure 5. Base-Emitter On Voltage

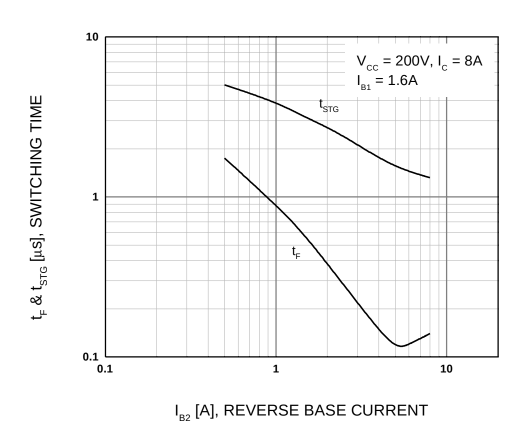


Figure 6. Resistive Load Switching Time

Typical Characteristics (Continued)

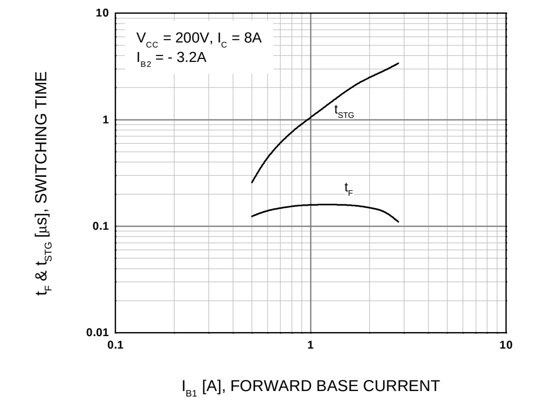


Figure 7. Resistive Load Switching Time

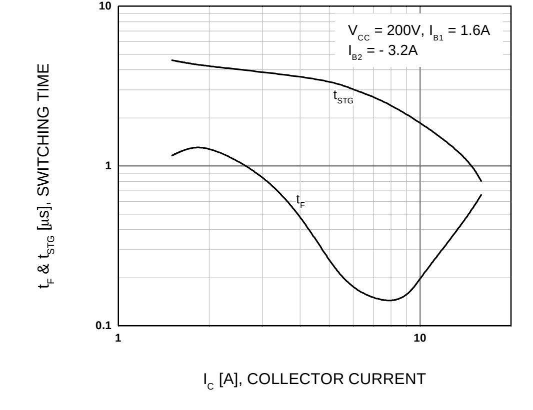


Figure 8. Resistive Load Switching Time

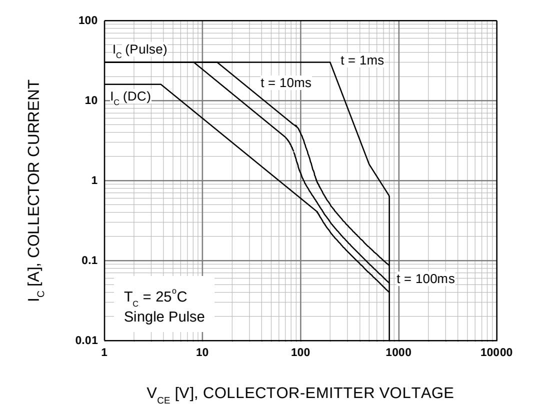


Figure 9. Forward Bias Safe Operating Area

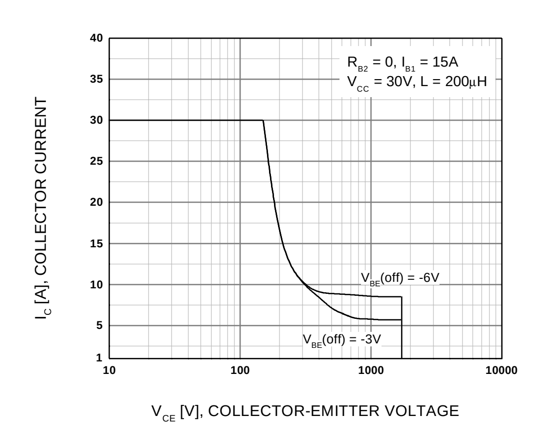


Figure 10. Reverse Bias Safe Operating Area

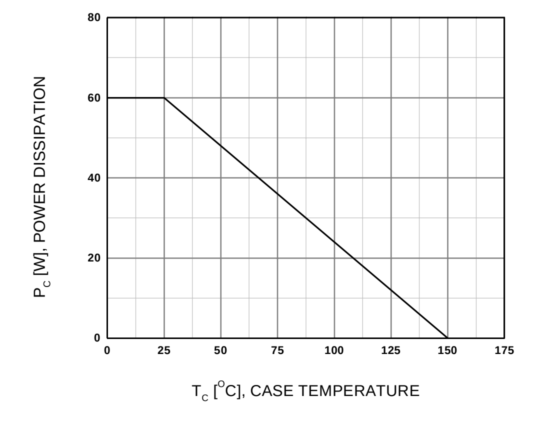
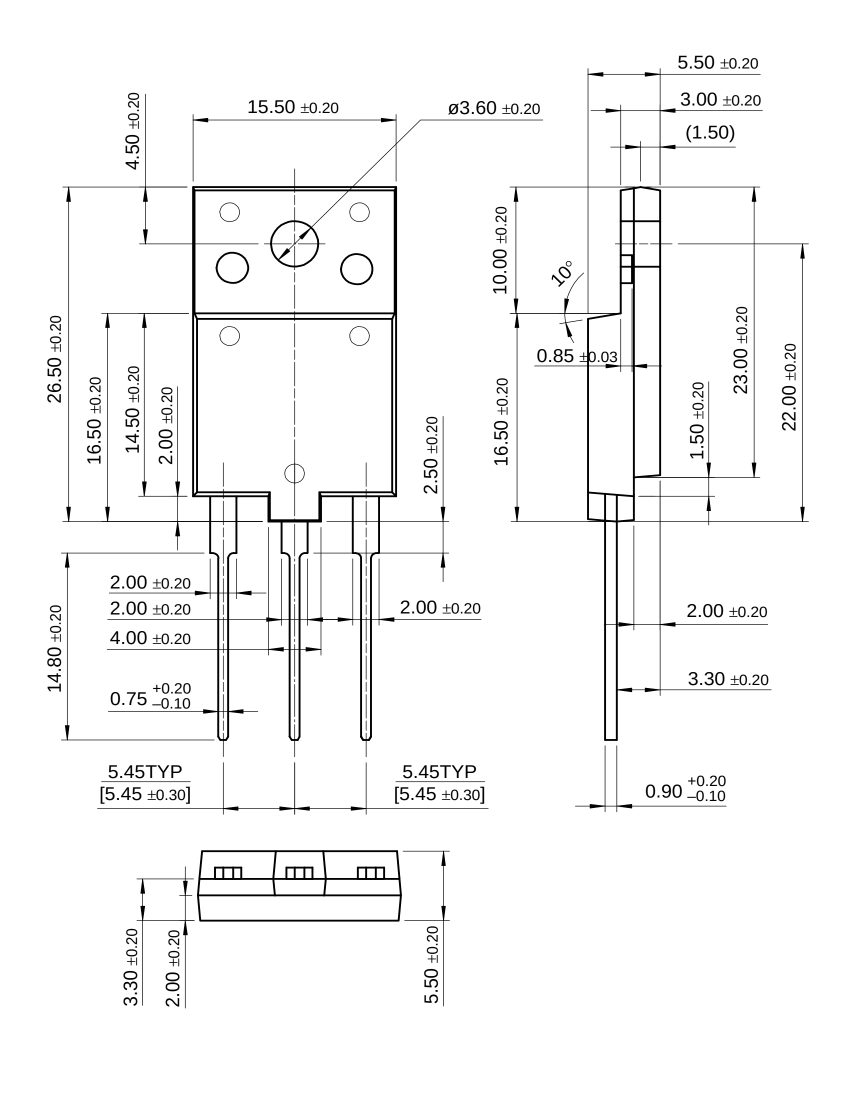


Figure 11. Power Derating

Package Demensions

TO-3PF



Dimensions in Millimeters

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EnSigna™	MicroFET™	QT Optoelectronics™	TinyLogic™	
FACT™	MicroPak™	Quiet Series™	UHC™	
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